

Nov. 26th.

Mr. LEA, President, in the Chair.

Ninety-one members present.

In accordance with the invitation extended at the preceding meeting, Dr. Hayes gave a narrative of the explorations of his late Arctic expedition. He made copious collections in various departments of Natural History, which, with great liberality, he placed at the disposal of the Academy, for the selection of such specimens as are desirable additions to the Museum.

On report of the respective Committees, the following papers were ordered to be published in the Journal:

Monograph of the Polyzoa of the Secondary and Tertiary formations of North America, by Wm. M. Gabb, and George H. Horn, M. D.

New Unionidæ of the United States, by Isaac Lea.

Descriptions of new Birds from Western Africa in the Museum of the Academy of Natural Sciences of Philadelphia, by John Cassin.

And the following in the Proceedings:

#### Notes on the Coleopterous Fauna of Lower California.

BY JOHN L. LE CONTE.

The Coleoptera of Lower California, thus far unknown to science, are now, by the industry of my indefatigable friend, Mr. John Xantus, capable of being duly compared with those of contiguous regions. His collections embrace (as I am informed by him) more than 500 species, of which the portions thus far sent to me contain 114. It is not my intention on the present occasion to describe the new species which have thus become known to me, but rather to await the arrival of the remainder of the collections, and then to prepare a synopsis of the fauna. In this paper I will merely call attention to the relations between the fauna of the region in question and those of California, Arizona, Mexico and Texas, describing only a few of the most conspicuous and characteristic species.

Among the 114 species which I have received, the following are found in Upper California (maritime): *Cicindela sigmoidica* Lec.; *C. hemorrhagica* Lec.; *Hydrophilus californicus* Lec.; *Tennochila chlorodia* Lec.; *Sphenophorus procerus* Lec.; *Dermestes Mannerheimii* Lec.; *D. vulpinus* Linn.

These are found in Arizona: *Saprinus fimbriatus* Lec.; *Cerenopus concolor* Lec.; *Hydrophilus limbalis* Lec.; *H. ellipticus* Lec.; *Diptotaxis angulata* Lec.; *Clerus lateinctus* Lec.; *Asclera cana* Lec.; *Dineutus sublineatus* Aubé, (♀ integer Lec.); *Sinoxylon asperum* Lec.; *Arhopalus curystethus* Lec.

And these in Texas and New Mexico: *Megacephala carolina* Dej.; *Casnonia pennsylvanica*; *Lebia grandis* Hentz.; *Plochionus timidus* Hald.; *Derobrachus geminatus* Lec.; *Elaphidion validum* Lec.; *Tragidion annulatum* Lec.; *Dendrobias 4-maculatus*; *Coccinella abdominalis* Say; *Acmeodera flavomarginata*; *Dermestes vulpinus* Linn.; *Euparia strigata*?; *Ligyris rufinasus* Lec.; *Ludius (Crigmus) texanus* Lac.; *Bostrichus punctipennis* Lec.; *Notoxus monodon*?; *Sitophilus oryzae*; *Hydrophilus triangularis* Say; *Polycaon exesus* Lec.; *Calosoma scutator* Fabr.

Of the remaining species nearly all appear to be new; the genera are those already known in our territory, with the exception of one species of *Megasoma*, several species (perhaps five) of *Breathus*, allied to the common Mexican species, and three *Cerambycidae* of unknown genera.

1861.]

A very few are closely allied to, and perhaps identical with described Mexican species, but the number is very small.

Some of the more conspicuous and peculiar species are described below: enough has been stated to show that the affinities of the fauna are with that of the region extending from the Colorado Desert across to the Rio Grande valley, thereby confirming the results obtained\* by Prof. Baird and Mr. Cope† from the study of the vertebrata collected by Mr. Xantus.

The limited number of species of those two classes precludes the possibility of the occurrence of many new forms in the region here treated of; but in the number of peculiar species of the much more extensive class of insects seen in Mr. Xantus' collections, we recognize that Lower California constitutes one or more provinces of the Interior district, as defined by me in the introduction to my synopsis of the Coleoptera of Kansas and New Mexico.‡

The preponderance of Tenebrionidæ, both in genera and species seen in the fauna of Upper California and Arizona has here been partially destroyed. The genera which survive are, however, such as are already known from the last mentioned region. None of those peculiar to maritime California have as yet occurred.

#### MEGASOMA Kirby.

*M. Thersites*, piceo-niger; ♂ sordide pubescens, capite cornu elongato apice bifurco, thorace dense punctulato, angulis anticis acutis divaricatis, cornu brevi apice emarginato, elytris punctulatis et obsolete punctatis; ♀ punctata, thorace glabro elytris parce pubescentibus, basi glabris. Long. 1·18—1·40.

Cape San Lucas. Very much smaller than the other species, of which it approaches most nearly to *M. Hector*, but the anterior angles of the thorax are divergent.

#### EURYOMIA Burm. (emend. Lac.)

*Eu. fascifera*, nigra, clypeo apice truncato et late reflexo, thorace latitudine haud breviora, lateribus obliquis parum rotundatis, nigro nitido, parce punctato, margine basali lateribusque flavis, his puncto nigro ante medium notatis, elytris opacis, a humeris paulo angustatis, margine humerali fasciis duabus latis apiceque flavis, pectore abdominisque lateribus pallide pilosis. Long. ·66.

Cape San Lucas.

#### CHALCOLEPIDIUS Esch.

*C. rubripennis*, niger, squamulis minutis aureo-smaragdinis dense tectus, thorace latitudine fere sesqui longiore, lateribus rotundatis, angulis posticis brevibus divergentibus, elytris rubris, striis nigris punctatis, interstitiis paulo convexis. Long. 1·11—1·75.

Cape San Lucas. A specimen also sent as found at Cajon Pass, California. Belongs to the group of the genus, having the scutellum triangular, slightly emarginate in front, and the third joint of the antennæ equal to the fourth. The antennæ are serrate in both sides.

#### LYCUS Fabr.

*L. cruentus*, læte coccineus, thorace latitudine breviora, apice carinato, dein fovea rhomboidea impresso, elytris postice sensim dilatatis thorace duplo latioribus, margine costisque quatuor parum elevatis, interstitiis rugose punctatis, a dodrante ad apicem nigris, tibiis tarsis antennis capiteque nigris, hoc angusto thorace haud breviora. Long. ·37—·53.

Cape San Lucas. The elytra of the females are less dilated behind so as to be only one half wider than the thorax.

\* Proceedings Acad. Nat. Sci. 1859, 299.

† Ibid, 1861, 305.

‡ Smithsonian Contributions, vol. xi. p. iv. (These results are also alluded to on page 49 of these Proceedings for 1860.)

## PELECYPHORUS Sol.

*P. ægrotus*, ater opacus, thorace latitudine haud brevior, lateribus late rotundatis serratis, postice subangustato, et lateribus sinuato, angulis posticis acutis, basi late emarginato, lateribus et plaga dorsali postica transversim rugose punctatis; elytris thorace duplo latioribus, ovalibus postice valde declivibus et prolongatis, humeris rotundatis, margine costaque discoidali postice magis elevata et abbreviata rugis transversis undulatis elevatis connexis, epipleuris sublævibus. Long. .90.

One specimen. Cape San Lucas. In general appearance resembles in an extraordinary manner *P. morbillus* Lec. (Pr. Ac. 1858, 74), but, besides minor differences, the humeri are not toothed but rounded.

*P. bifurcus*, ater, subnitidus, thorace punctato valde convexo, lateribus rotundatis, basi sinuato, angulis omnibus acutis, margine anguste reflexo, dorso profunde canaliculato; elytris postice sensim latioribus, basi subemarginatis, angulo humerali distincto obtuse, parce punctatis, margine elevato pone trientem duplici. Long. .73.

One specimen. Cape San Lucas. The elevated lateral margin of the elytra bifurcates at the anterior third, the portions then diverge, neither reaching the tip; the inner is a little more elevated, but also a little shorter than the outer portion.

*P. sexcostatus*, sordide niger, parce pubescens, thorace latitudine paulo brevior planiusculo, lateribus late rotundatis anguste reflexis, angulis acutis, haud dense punctato; elytris elongato-ovalibus, parce punctatis, margine laterali serrulato costisque dorsalibus duabus, (interna integra, altera utrinque abbreviata) acute elevatis. Long. .50.

One specimen. Cape San Lucas. In form somewhat resembles *P. parallelus* Lec., but the sides of the thorax and elytra are more rounded.

## CENTRIOPTERA Mann.

*C. spiculifera*, nigra, subnitida, thorace latitudine brevior, postice angustato lateribus valde rotundatis, postice breviter paulo sinuatis, angulis posticis rectis; elytris elongato-ovalibus, thorace parum latioribus, seriatim punctatis, interstitiis internis planis parce uniseriatim punctatis, ad apicem et externis tuberculis valde acutis ornatis, femoribus posticis intus tuberculis exasperatis. Long. 1.08.

Larger and stouter than *C. muricata* Lec., with the tubercles more acute and more elevated, so as to become towards the apex actual short spines; the sides of the thorax are also not strongly punctured.

## CRYPTOGLOSSA Sol.

*C. seriatæ*, nigra subnitida, thorace latitudine brevior, parum convexo, postice modice angustato, lateribus rotundatis postice subsinuatis, angulis posticis rectis, elytris subovatis, postice subacutis, seriatim punctatis, interstitiis parce uniseriatim punctatis, externis postice tuberculis parum elevatis exasperatis. Long. .75—86.

Cape San Lucas. Has very much the form of *Centrioptera*, but the hind thighs are not at all serrate.

## CERENOPUS Lec.

*C. cribratus*, niger, subnitidus, thorace ovato, convexo, latitudine longiore, basi late subemarginato, elytris seriatim cribratis, ad apicem utrinque tuberculo magno obtuso, alteroque parvo suturali armatis. Long. .55—71.

Mas tibiis anticis introrsum sinuatis, et serratis, femoribus posticis dente magno acuto armatis.

Femina tibiis anticis crassioribus haud serratis femoribus posticis simplicibus.

Cape San Lucas. Of the same general form as *C. concolor* Lec.

1861.]

## DIABROTICA (Chevr.) Er.

D. ? *insolita*, supra sordide flava, thorace latitudine duplo brevior, apice subsinuato angulis anticis prominulis, basi emarginato angulis obtusis subrotundatis, lateribus anguste marginatis, elytris thorace latoribus oblongis, confertim punctatis, gutta posthumerali, alteraque discoidali pone medium, nigris ornatis, scutello nigro; subtus niger, abdominis segmentis flavo-piceo marginatis, femoribus flavis palpis antennisque nigris, his thorace elytrisque haud brevicribus.

Mas alatus abdomine elytris haud longiore. Long. .23.

Femina aptera, abdomine inflato, elytris plus duplo longiore. Long. .46.

Cape San Lucas. The difference in size between the sexes is produced entirely by the abdomen of the female being immensely distended. The first joint of the antennæ is sometimes piceous, and the head has sometimes a short black occipital line. The thorax is moderately convex, with a slight impression at the middle, and another at the base; there is also a faint transverse impression before the middle. The second and third joints of the antennæ are together equal to the fourth.

It is extraordinary to find the genera of the Pacific coast of most diverse families in which the abdomen of one or both sexes is imperfectly covered by the elytra, and the wings wanting, thus unexpectedly increased by a Chysomelide. There does not appear to me any sufficient reason for separating the present species from *Diabrotica*, though I have not as yet studied the group to which it belongs sufficiently to entitle my opinion to much weight.

New species of COLEOPTERA inhabiting the Pacific district of the United States.

BY JOHN L. LE CONTE, M. D.

The species described in the present paper have been derived partly from contributions of friends, partly from Government expeditions. Those from the Northwestern Boundary Commission were made by Mr. George Gibbs, and the late Dr. Kennerley; those from Lieut. Mullan's Wagon Road Expedition were collected by Mr. John Pearsall, and have been submitted to me by the Smithsonian Institution. It is much to be regretted that the most valuable portion of the last mentioned collection, procured within the mountainous region at the head of the Missouri river, has in great part been rendered by the collector unavailable for scientific research; the restrictions placed upon investigations by the Entomological Society of Philadelphia, now in possession of the larger part of the collection, being such as to render any satisfactory comparisons extremely difficult.

I must return my cordial acknowledgements to Mr. Andrew Murray, now of London, for the liberality with which he has given specimens, many indeed unique, in aid of my investigations; and also to Mr. Alex. Agassiz, for excellent collections made at San Mateo, Mendocino City, and on the Gulf of Georgia; and to Mr. C. M. Bache, U. S. Coast Survey, for a good series of species from the islands of Santa Barbara and Santa Cruz; and likewise to Mr. G. Davidson, U. S. Coast Survey, for his continued efforts in supplying specimens from California.

1. *Cicindela longilabris* Say. A beautiful green variety of this species was found at Kootenay Camp; a similar variety has been found in Newfoundland.

2. *Cicindela montana*, atra, labro magno, antice obtuse dentato, lateribus sinuato, thorace transverso, trapezoideo, modice convexo, confertim rugoso, impressionibus profundis, elytris nitidis, confertim punctatis, fascia trans-

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